

Application No. 10/028,978  
Amendment dated September 14, 2005  
Non-Final Office Action dated June 16, 2005

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**REMARKS**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant wishes to thank the Examiner for the telephone interview on September 14, 2005 during which time the point of novelty was discussed, namely the physical formation of the land section radial wobble having a shape corresponding to superimposed waves comprising a phase modulated wave and a single frequency wave. The Examiner indicated his need to further consider the amended claims and the cited prior art so that no agreement regarding patentability was reached.

The Examiner also indicated that claims 7 and 9 should be amended to properly claim the recording medium and the reproducing/recording apparatus more positively. This has been done in the accompanying amendment.

The Office Action and prior art relied upon have been carefully considered. Claims 1-4 and 6 were rejected under 35 U.S.C. § 103(a) as obvious over Ohgo (US 6,269,072) in view of Takeda (US 6,512,735) and further in view of Ko (US 6,813,230). Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohgo in view of Takeda and further in view of Ko, and further in view of Misawa (US 5,948,593). Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohgo in view of Takeda and further in view of Ko and further in view of Watanabe (US 4,651,172). Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohgo in view of Takeda and further in view and Ko and further in view of Yamamoto (US 6,721,259). Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohgo in view of Takeda in view of Ko and further in view of Yamamoto and Tsukihashi. Claims 10-13

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and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohgo in view of Takeda and further in view of Tanase and Abe (6,381,208). Claim 13 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohgo in view of Takeda and further in view of Tanase, Abe and Masawa. Claim 14 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohgo in view of Takeda and further in view of Tanase, Abe and Watanabe. Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohgo in view of Takeda and further in view of Yamamoto. Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohgo in view of Takeda and further in view of Yamamoto and Tsukihashi. Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohgo in view of Takeda and further in view of Yamamoto and Tsukihashi.

The present invention relates to an information recording medium composed of a recording layer and a light transmission layer, which is laminated on a substrate that is provided with groove and land sections formed alternatively in parallel (see claim 1 and page 11, line 21 to page 12, line 1). The recording layer satisfies a relation of  $P < \lambda/NA$  (see page 18 paragraph number [0025]). A thickness of the light transmission layer is within a range of 0.070 to 0.120 mm (see page 16, lines 21-28).

Further, the land section is recorded with a particular physical pattern or shape wherein the land section is wobbled in the radial direction and having a wobbled shape that corresponds to a recorded superimposed single frequency wave having a frequency of integral multiples or one over integral multiples of a modulating phase modulated wave. (see paragraph numbers [0067], [0079] to [0087] on pages 38-39, 44-48).

On the other hand, the cited Ko et al. reference (US 6,813,230) teaches that a phase-modulated push-pull signal is multiplied by a wobble clock signal (Column 7, lines 3-7). It is mentioned in the description that a phase-modulated push-pull signal is multiplied by a wobble clock signal when detecting a wobble address from a groove

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track. However, Ko et al. fail to disclose a physical shape of a land track as currently claimed.

Further, as shown in FIG. 11 and in Column 10, line 59 to Column 11, line 45, multiplying a phase-modulated push-pull signal by a wobble clock signal is conducted by the multiplier 210.

In addition thereto, Ko et al. fail to disclose a land section that is wobbled in the radial direction and having a wobbled shape corresponding to a recorded superimposed single frequency wave having a frequency of integral multiples or one over integral multiples of a modulating phase modulated wave as disclosed in the present invention.

Accordingly, the major feature of the present invention is a physical shape of a land section.

As mentioned above, the present invention is neither unpatentable nor anticipated by cited prior art.

Regarding the Examiner's rejection of Claims 10-18, only claims 10-15 remain (claims 16-18 being canceled). In the case of Tanase et al. (US 6,240,056), Tanase teaches that protection film 62 formed of ZnS-SiO<sub>2</sub> has a film thickness of 200 nm (tolerance error  $\pm$  10 nm) (Col. 7, lines 23-32). These values are equivalent to 0.0002 mm (200 nm =  $2 \times 10^{-4}$  mm) and 0.00001 mm (10 nm =  $1 \times 10^{-5}$  mm) respectively, in case these numerical unit of "nm (nanometer)" are converted into "mm (millimeter)" according to the present invention. Accordingly, these numerical limits are quite different from those of the present invention.

Abe et al. (US 6,381,208) teaches that light transmitting layer having uneven thickness results in increased spherical aberration (Col. 2, lines 24-29). However, neither Abe nor Ohgo discloses that scattering of thickness of the light transmitting layer is

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within the range of  $\pm 0.002$  mm. Consequently, the range of  $\pm 0.002$  mm for scattering of thickness according to the present invention is neither anticipated nor unpatentable over Ohgo in view of Takase and Abe.

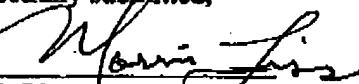
In view of the above, consideration and allowance are, therefore, respectfully solicited.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

The Director is hereby authorized to charge any fees, or credit any overpayment, associated with this communication, including any extension fees, to CBLH Deposit Account No. 22-0185, under Order No. 21994-00036-US from which the undersigned is authorized to draw.

Dated:

Respectfully submitted,

By 

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